

EXCERPTA MEDICA Sec.7 Vol.12/3 Pediatrics March 1955

Pletneva, G. G.

881. COURSE AND FORMS OF TUBERCULOSIS IN CHILDREN REVACCINATED AT AN EARLY AGE (Russian text) - Pletneva, G. G.
 Res. Inst. of Tb, Moscow - PROBL. TUBERK. 1955, 34:3 (1955)
 Study of histories of 51 children revaccinated at an early age who were born and treated in tb-sanatoria in 1952-1953 and the first half of 1954. These children had been vaccinated in the first days after birth and revaccinated at an early age for various reasons. The control group comprised 32 children vaccinated but not revaccinated for various reasons. The 2 groups were identical with regard to age and form of disease. The forms of the disease observed were: primary complex, bronchopneumonia, adenitis and tb-meningitis. The incidence of severe and complicated forms was much lower in the revaccinated group than in the control group. Local complications were mild in the revaccinated children and moderate to severe in the control group. Toxic symptoms were less marked in the revaccinated group, 19 of whom recovered considerably, as revealed by rapid resorption and regression of local complications in the lungs and bronchial lymph nodes. These patients were observed radiologically and clinically during 0.5-3 months of stationary hospitalization treatment without any antibiotic treatment. In general the duration of treatment until the regression stage was attained was shorter in the revaccinated group. The onset of disease could be detected at various times after revaccination. Some of the children became ill 2 months after revaccination, a fact which speaks for the necessity of revaccination in the pre-allergic period of infection. No unfavourable effect of BCG was observed in these cases. The insufficient effect of revaccination may have been due to contact with a carrier of tb bacilli, to unfavourable living conditions, or especially to infectious disease occurring shortly before or after revaccination. As a rule, however, revaccination induces a more favourable course of tb in children.

Soloveva - Moscow

PLETNEVA, G.G. (Moskva)

Tuberculosis in children. Fol'd. i akum. 20.000.000

(TUBERCULOSIS)

(CHILDREN)

1. PLETNEVA, G. G.
2. USSR (600)
4. Meninges--Tuberculosis
7. Early diagnosis of tuberculous meningitis in tubercular aff. of
Probl. tub. no. 5 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____

11/17/11
MARKUZON, V.D., professor; PLETNEVA, G.G., nauchnyy sotrudnik

Variation in the form of manifestation of tuberculosis
in Moscow [with summary in French] Probl.tub. 3/4 1961 1-4

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo
nogo instituta (dir. V.F.Chernyshev, zav. detskimi otdeleniyami
V.D.Markuzon)

(TUBERCULOSIS, in infant and child,
variation of clin. picture (Rus))

~~PLETNEVA~~, G.G.; BRAUDE, M.M.

Joint session of the pediatric section of the Moscow Branch of the All-Union Society of Phthisiologists and the tuberculosis section of the Moscow Branch of the Society of Pediatricians, held to commemorate the memory of N.A. Kozlov and the 70th anniversary of the Pediatric Tuberculosis Hospital. Probl.tub. 35 no.8:121 '52. (MOSCOW)

(MOSCOW--TUBERCULOSIS--HOSPITALS AND SANATORIA)

EXCERPTA MEDICA Sec 7 Vol. 11/6 Paediatrics 5 27

1626. PLETNEVA G.G. City Scient. Res. Inst. of Tb, Moscow. Complicated forms of tuberculosis in children re-vaccinated at an early age (Russian text) PROBL. TUBERC. 1955, 2/117. The 51 children had been vaccinated in the first days after birth at an early age. The control group consisted in 32 children, not vaccinated due to various reasons. The following forms of tuberculosis were observed: primary complex, broncho-adentitis and tb-meningitis. In the first group the number of severe and complicated forms was much less than in the control group. In the first group 19 patients improved considerably, resorption and reduction of local changes in the lungs and lymphatic bronchi. These patients were observed radiographically and clinically for 6 months of stationary treatment without an antibiotic treatment. 12 children became ill 2 months after revaccination, a fact which speaks in favour of revaccination in the pre-allergic period of infection. No unfavourable effect of BCG was observed in these cases. The insufficient effect of revaccination was due to contact with a carrier of tb-bacilli, unfavourable living conditions, especially infectious, diseases occurring shortly before or after revaccination. Soleveva - Moscow.

PIETNEVA, G.G., nauchnyy sotrudnik

Course and forms of tuberculosis in young children after revaccination
Probl.tub. 34 no.4:19-23 Jl-Ag '56. (MIR, 1956)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo tuberkul'oznogo
instituta (dir. V.F.Chernyshev, nauchnyy rukovoditel' -- prof. V.I.
Eynis, zav. detskim sektorom - prof. V.D.Markuzon)
(TUBERCULOSIS, in inf. and child
develop. & forms after revacc.)
(BCG VACCINATION, in inf. and child
tuberc. develop. & forms in revaccinated child.)

PLETNEVA, G.G.

"Preventive inoculations against tuberculosis" by I.O. Kornblium.
Med.sestra 18 no.10:43 0 '59. (MIRA 1959)
(TUBERCULOSIS--PREVENTIVE INOCULATION)
(KORNBLIUM, O.I.)

PLETNEVA, E.G. (Cand. Vet Sci, L'vov)

"Our Method of Treating Trichomoniasis"

Report given at 13th Inter-VUZ (Higher Educational Insts.) Scientific-Industrial Conference, held February, 1956 at Kiev Vet Inst.

PLETNEV, Ye.A., dotsent

N.I.Pirogov, his role and importance in the development of tuberculosis study. Zdrav. Turk. 5 no.4:42-44 J1-Ag '61. (MIRA 14:10;
(PIROGOV, NIKOLAI IVANOVICH, 1810-1881)
(TUBERCULOSIS)

MOISEYEV, Anatoliy Aleksandrovich; PLETNEV, V.S., red.; BEGICHEVA, M.N.,
tekhn.red.

[Marine steam turbines] Sudovye parovye turbiny. Moskva, Izd-vo
"Morskoi transport," 1958. 463 p. (MIRA 12:4)
(Marine engines) (Steam turbines)

PLETNEV, Vladimir Stepanovich; STAVROVSKIY A.Ye., red.; KOPTEKOVA, L.A.,
red.; SOKOLOVA, R.Ya., tekhn. red.

[Work of grade 5-7 students in agriculture; from the experience of
the Kursk Province schools] Trud uchashchikhsia V-VII klassov sel'-
skokhoziaistvennom proizvodstve; iz onyta raboty shkol Kurskoi ob-
lasti. Pod red. A.E.Stavrovskogo. Moskva, Izd-vo Akad. pedagog.
nauk RSFSR, 1957. 56 p. (MIRA 14:7)
(Agriculture—Study and teaching)

PLETNEV, V.S.
BES, Dzh. [Bes, J.]; POGOREL'SKIY, R.A. [translator]; TARATUCHENKO, N.I.,
[translator]; SHIROKOV, S.I., red.; PLETNEV, V.S., red.; TIKHONOVA,
Ye.A., tekhn.red.

[Chartering and shipping terms. Translated from the English]
Morskoe frakhtovye i transportnye terminy. Pod red. S.I. Shirokova.
Moskva, Izd-vo "Morskoi transport," 1957. 133 p. (MIRA 11:5)
(Shipping--Terminology)

GEKHTBARG, Yefim Aronovich; PLETNEV, V.S., red.; MAL'KOVA, V.K.,
tekhn. red.

[Operational planning of cargo transportation by the
merchant marine] Operativnoe planirovanie perevozok gru-
zov na morskoy transporte. Moskva, Izd-vo "Morskoy tran-
sport," 1963. 119 p. (MIRA 17:3)

L 10250-66 EWT(1)/EWT(m)/EPP(n)-2/T/EWP(t)/EWP(b)/EWA(e) IJP(c) JD/JG
 ACC NR: AP5027097 SOURCE CODE: UR/0149/65/000/005/0113/0116

AUTHOR: Platenov, V. M. 44, 55

ORG: Department of Foundry Production Technology, Moscow Aviation Technology Institute (Kafedra tekhnologii liteynogo proizvodstva, Moskovskiy aviatsionnyy tekhnologicheskyy institut) 44, 55

TITLE: Effect of hydrogen on the resistivity of niobium 27, 44, 55

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 5, 1965 113-116

TOPIC TAGS: niobium, hydrogen, resistivity, solid mechanical property

ABSTRACT: The effect of hydrogen on the resistivity of niobium has been investigated at 20--1000C. Hydrogen was introduced in niobium wires 1.5 mm in diameter and 1000 mm long in the amount of 0.002, 0.005, 0.01, 0.02, 0.05, 0.1 and 0.3%, and the resistivity of niobium wire was determined at 20--800C and also at 500--1000C in hydrogen atmosphere under 650 mm Hg pressure. It was found that hydrogen increases the niobium resistivity, especially at temperatures up to 400C, when hydrogen content is raised from 0.01 to 0.02% (see Fig. 1). Although the mechanical properties of niobium and its alloys drop sharply at a hydrogen content of 0.02% (the elongation of niobium drops from 7--18% to 2--3%), microscopic examination

Card 1/2

UDC: 669.293

PLETNEV, V.M. (Kiyev)

Electrocardiographic examinations in postinfluenzal pneumonia.
Vrach.delo no.3:94-97 Mr '63. (MIRA 16:4)

1. Institut infektsionnykh bolezney Ministerstva zdravookhraneniya
UkrSSR.

(INFLUENZA) (ELECTROCARDIOGRAPHY) (PNEUMONIA)

PLETNEV, V.M.

Ballistocardiographic table with dual damping methodology
of ballistocardiography. Terap. arkh. 35 no.5:89-90 My'63
(MIRA 16:12)

1. Iz Instituta infektsionnykh bolezney (dir. - prof. I.L.
Bogdanov), Kiyev.

FILETNEV, V.M. (Kiyev)

Electrophoretic studies on protein fractions of the blood serum
in postinfluenzal pneumonias. Sbor.nauch.trud. Inst.infek.bol.
no.4:180-184 '64. (MIRA 18:6)

DEMIN, V.I. (Miyev); PLETNEV, V.M. (Kiyev)

Protein fractions of the blood serum in complicated and uncomplicated
influenza. Sbor.nauch.trud. Inst.infek.bol. no.4:173-179 '64.
(MIRA 1836)

PLETNEV, V.I., inzhener.

Using the PK-6 crane in lifting track while placing ballast.
Transp.stroi. 6 no.1:29-30 Ja '56, (MLRA 9:5)
(Railroads--Track) (Cranes, derricks, etc.)

ABRAMOVICH, I.I., inzh.; PLETNEV, V.I., inzh.

New jib for a tower crane. Stroi. i dor. mash. 7 no. 3:15-21
Mr '62. (MIRA 15:15)

(Cranes, derricks, etc.)

PLETNEV, V.I.

VORONTSOV, B.V., inzhener; YEGNUS, Ye.L., kandidat tekhnicheskikh nauk;
PLETNEV, V.I.; YANKOVSKIY, O.A.

Building narrow-gauge railroads by specialized crews. Torf.
prom. 34 no.3:24-28 '57. (MLRA 10:5)

1. Vsesoyuznyy nauchno-issledovates'skiy institut transportnogo
stroitel'stva Ministerstva transportnogo stroitel'stva.
(Railroads--Construction)

L 9034-66

ACC NR: AP5023086

thickness is 4 mm or more, and 4) intensive seam cooling in stainless pipe welding substantially increases the pipe resistance against intercrystalline corrosion without subjection to thermal treatment. The Pervoural'skiy starotrubnyy zavod (First Ural Plant of Old Style Pipes) has been applying intensive cooling to the seam and weld region in argon arc welding of pipes for a period of two years with positive results. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Pervoural'skiy starotrubnyy zavod (First Ural Plant of Old Style Pipes)

SUBMITTED: 26Feb65

ENCL: 00

SUB CODE: MM, IE

NO REF SOV: 005

OTHER: 000

jw

Card 2/2

L 9034-66

ACC NR: AP5023086

MJW/JD/HM/HW/WB

UR/0125/65/000/002/00 5/0036

UDK 621.791.762.621.9-482:569.14.0.12.1

AUTHOR: Grinberg, Z.A. (Engineer); Gazman, S.M. (Engineer); Tolstikov, R.M. (Engineer)
Pletnev, V.I. (Engineer)

TITLE: Effect of cooling rate of seam on the corrosion resistance of welded pipes
from Khl8NiOT steel

SOURCE: *Avtomaticheskaya svarka*, no. 9, 1965, 65-66

TOPIC TAGS: metal welding, seam welding, pipe, stainless steel, welding technology, cooling, cooling rate, corrosion, corrosion resistance, weld heat treatment

ABSTRACT: The effect of intensive cooling was investigated by cooling the weld root and thermal effect region with a sprayer installed inside the pipe together with a head pressure gas nozzle to provide a minimal flash. A specially designed case was used to prevent the dropping of the water or steam into the molten pool. The heat was removed through the thin wall of the case continuously washed by a stream of water which was diverted at a safe distance from the welding zone. The experimental results show that 1) intensive cooling of the seam and of the thermal effect region considerably reduces the number of rejects due to corrosion, 2) it is advantageous to apply intensive cooling to welding stainless pipe whose wall thickness is more than 2 mm, 3) the best effect of seam root cooling can be expected in welding pipes whose wall

Card 1/2

PLETNEV, V. G.

"A New Working Price" Sta Vostok, 12, No. 2, 1951.

Report 8-15-5, 4 Oct. 1951

I. 40041-15

ACCESSION NR: AP5009654

following Stormer's theory. Boundary currents diminish the magnetic field at neutral points. This effect shows up in the beginning of a magnetic storm. The combination of the current field and the dipole serves to straighten the force lines in the magnetosphere and stretch them towards the solar wind. The proton belt is nearer the earth than the electron belt. Orig. art. has: 3 figures and 2 formulas.

[EG]

ASSOCIATION: none

SUBMITTED: 31Dec64

ENCL: 00

SUB CODE: AA, ES

NO REF SOV: 004

OTHER: 011

ATD PRESS: 3245

Card

2/2

L 49441-5 ENT(1)/ENG(v)/FCG/EEC-4/EEC(t)/EAA(h) Po-4/Pa-5/Pq-4/Pae-2/Peb/
 ACCESSION NR: AP5009654 UR/0293/65/003/002/0336/0340

AUTHOR: Pletnev, V. D.; Shuridin, G. A.; Shalimov, V. P.;
Shvachunov, I. N.

TITLE: Dynamics of the geomagnetic trap and the origin of radiation belts

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 2, 1965, 336-340

TOPIC TAGS: magnetosphere, solar wind, geomagnetic field, magnetic storm, force line, proton belt, electron belt

ABSTRACT: The boundary of the magnetosphere created by the interaction between the solar wind and the geomagnetic field reaches a distance of 10 terrestrial radii on the day side of the earth. Electric currents on the boundary increase the magnetic field there. On the night side the magnetosphere is very extended. A particle may pass through the boundary of the magnetosphere because of a radial drift of the particle in an asymmetric magnetic field. The physical processes are studied in a magnetic field from parallels $\pm 70^\circ$. The regions permitting and prohibiting particle motion are determined.

Card 1/2

L 65236-65

ACCESSION NR: AP5020992

ENCLOSURE: 01

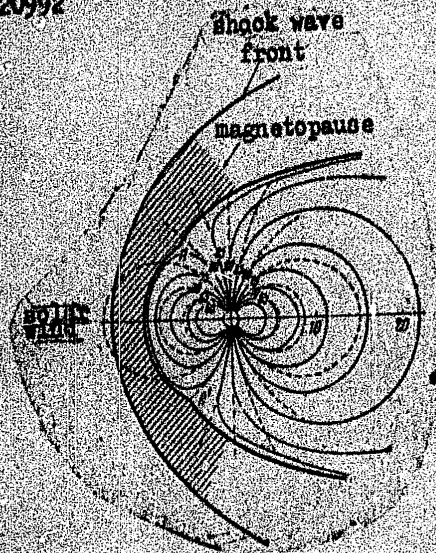


Fig. 1

Card 4/4

L 65296-65

ACCESSION NR: AP5020992

4466 4456 4455 24

this work. The authors thank also Ye. L. Al'pert, B. A. Tverskiy, B. V. Chirkinov, V. I. Volosov, I. I. Krasovskiy, Ye. L. Gal'perin, V. V. Temnyy, and other colleagues for taking part in evaluating this work and also L. A. Kazanova for reviewing this material and for formulating this paper." Orig. art. has 12 formulas, 14 figures, and 1 table.

ASSOCIATION: none

SUBMITTED: 06Apr65

ENCL: 01

SUB CODE: ES, AF

NO REF SOV: 026

OTHER: 012

Card 1/4

L 65296-65

ACCESSION NR: AP5020992

24

where γ is the Störmer integration constant,

$$\gamma = \frac{M}{2M_0 r_0^3}$$

and M is the magnetic moment of the earth's dipole. It is shown that the only particle penetration occurs in the vicinity of the neutral points AA' , in the diurnal side of the magnetosphere. This penetration creates gradient and radius of curvature drift of charged particles, resulting in the formation of magnetic field neutral layers and a plasma wake in the equatorial plane in the night side. Data are reported from the Electron-2 artificial satellite in support of this argument. These trapped particles are shown to be responsible for auroral phenomena and magnetic storms. The inverse phase of the magnetic storm is connected with the sharp drop in solar particle emission at the magnetosphere boundary and a decay in trapped particle drift currents on the geomagnetic trap boundaries. This magnetic decay causes particle drifts into the magnetic trap with a corresponding particle acceleration. This explains the experimental observation of increased intensity of high-energy particle flow in the outer regions of the trap during the reverse phase of magnetic storms. The authors express their gratitude to Sh. Sh. Dolginov, Ye. G. Ieroshenko, L. M. Zhurav, G. L. Vaynsberg, K. I. Gringolts, K. Z. Khokhlov, I. A. Savenko, and B. I. Savin for providing the experimental results and evaluating

Card 2/

L 65298-65 EW(1)/TCO/EWA(h) GW
 ACCESSION NO: A15020992

UR/0203/65/005/004/0626/0644
 550.388.2

AUTHORS: Pletnev, V. D. Skuridin, G. A. Shalimov, V. P. Shvachunov, I. N.

TITLE: Dynamics of the geomagnetic trap and the origin of earth's radiation belts

SOURCE: Geomagnetism i aeronomiya, v. 5, no. 4, 1965, 626-644

TOPIC TAGS: magnetic field, Van Allen belt, magnetic trap, geomagnetic field, charged particle concentration, magnetic storm, solar burst

ABSTRACT: The interaction of solar corpuscular streams with the geomagnetic field is discussed with explanations about the formation of the earth's magnetosphere and the mechanism of charged particle penetration into the magnetosphere. The scalar potential of the geomagnetic field inside the earth's magnetosphere is expressed in spherical harmonics, and the solar particle stream--geomagnetic field interaction is described by the model shown in Fig. 1 on the Enclosure. In order to analyze the possibility of particle penetration into the magnetosphere, the following equation is solved numerically

$$\frac{f}{x^3} - \alpha \rho + \frac{2y}{\rho} = \pm 1$$

Card 1/4

L 1738-66

ACCESSION NR: AP5011291

phenomena (magnetic storms, auroras, currents in the outer atmosphere of the earth, etc.) which occur in the earth's immediate vicinity. The history of investigations of the various cosmic ray particle fluxes outside the earth's atmosphere, and especially the development of the concept that the earth's magnetic field can serve as a trap for charged particles, is traced in a brief review of the work by Stoermer, Schmidt, Alfven, and others. The various theories advanced for the kinematics and dynamics of the earth's radiation belts immediately after their discovery and following the acquisition of data with rockets and space probes is then discussed. The main emphasis is on the analysis of the dynamic and kinematic properties from the point of view of conservation of adiabatic invariants of the motion of the charged particles in the magnetic field, which is equivalent to a consideration of the equilibrium state of the radiation belts in an unperturbed magnetic field. The authors describe the various methods of obtaining the distribution of the particles, as a function of the energy and of the spatial coordinates, from the laws of motion of the charged particles in the geomagnetic field as determined by means of the theory of adiabatic invariants.

Card 2/3

L 1738-66 EWT(1)/FCC/EMA(h) GW

ACCESSION NR: AP5011291

UR/0053/65/085/004/0605/0650
525.7

AUTHORS: Skuridin, G. A.; Pletnev, V. D.

TITLE: Principal hypotheses concerning the origin of the earth's radiation belts

SOURCE: Uspekhi fizicheskikh nauk, v. 85, no. 4, 1965, 605-650

TOPIC TAGS: Van Allen belt, radiation belt, geomagnetic field, solar wind
12-

ABSTRACT: Pointing out the failure of earlier attempts to interpret the available experimental material on the basis of a single hypothesis, the authors review numerous theoretical and experimental aspects of the origin of radiation belts. It is shown that the problem of investigating the earth's radiation belt is in its present stage a problem of studying the capture and motion of protons and electrons in the earth's magnetosphere. Of particular importance is the study of the interaction between the interplanetary plasma (solar wind) and the earth's magnetic field, since it may explain the various physical

Card 1/3

L 62103-65

ACCESSION NR: AP5015669

magnetic field, the authors consider data supplied from artificial satellites and space probes. They first consider measurements on the stationary geomagnetic field, determined within the field and at the boundary of the field. The boundary data and space data come from measurements made with the several space probes, particularly the Pioneer and Explorer probes. The next consideration involves streams of charged particles as they move into and through this field. Thirdly, the authors examine the time variation of the field and the closely related variation in intensity of corpuscular streams. In investigating the interaction between charged particles and the geomagnetic field, consideration is given to the total effect on the magnetic field of moving nonreacting particles within and at the boundary of the geomagnetic field, the effect associated with the collective action of external streams of rarefied magnetized plasma on the magnetic field, and the connection between processes outside and inside the field when charged particles break through. Orig. art. has: 10 figures, 2 tables, and 7 formulas.

ASSOCIATION: none

SUBMITTED: 18Feb65

ENCL: 00

SUB CODE: ES, AA

NO REF SOV: 012

OTHER: 032

Card 27-100

L 62103-65 EWI(1)/FCC/REC(t) Po-4/Pi-4 GN

ACCESSION NR: AP5015669

UR/0293/65/003/003/0408/0425
550.385.41(047)

AUTHORS: Fletnev, V. D.; Skuridin, G. A.; Ghesalin, L. S.

TITLE: Dynamics of the geomagnetic trap. I

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 3, 1965, 408-425

TOPIC TAGS: geomagnetic field, dynamic behavior, magnetic storm, radiation belt, aurora, space probe / Pioneer I, Pioneer V, Explorer XVIII, Explorer X, Explorer XII, Explorer XIV

ABSTRACT: The basic experimental data and the theoretical concepts concerning the geophysical phenomena occurring in space around the earth are considered. It is shown that such phenomena as magnetic storms, the aurora, radiation belts, and the finite sphere of the earth's magnetic field must be studied from some common viewpoint, since they are all intimately related. This complex of geophysical phenomena is called the dynamics of the geomagnetic trap. The present paper, containing only the first part of the study, is devoted to experimental data on the interaction of charged particles and the geomagnetic field and to some theoretical aspects of solving this problem. In seeking to define the shape of the earth's

Card 1/2

L 1281-66
ACCESSION NR: AT5023599

SUBMITTED: 02Sep65

NO REF SOV: 009

ENCL: 00

OTHER: 030

SUB CODE: ES, Nr

ATD PRESS: 410.2

Card 3/3

L 1281-66

ACCESSION NR: AT5023599

30

easily penetrate deeply into the geomagnetic trap during the main phase of such a storm. A theory is proposed for penetration of the magnetosphere by charged particles in the vicinity of neutral points. It is found that since there is no magnetic reflection in this case, particles with a constant positive velocity can penetrate the magnetosphere, the greatest probability being for particles moving in the plane $x = 0$. The distribution of drift currents is determined for particles inside the magnetosphere. Experimental data are given which confirm the theory proposed in this paper for penetration of the magnetosphere by charged particles. "The authors take this opportunity to express their gratitude to Sh. Sh. Dolginov, Ye. G. Yeroshenko, L. N. Zhuzgov, K. I. Gringauz, O. L. Vaysberg, I. A. Savenko and B. I. Savin for the experimental data given in this paper, and also for discussing the proposed theory. The authors are also grateful to Ya. L. Al'pert, B. R. Chirikov, M. Z. Khokhlov, B. A. Tverskiy, V. I. Krasovskiy, Yu. I. Gal'perin, V. V. Temnyy and others who took part in discussing this work while it was being prepared for the press. The authors also thank L. A. Kazenova for her great assistance in analyzing the materials and in the final layout of the article." Orig. art. has: 8 figures, 2 tables, 24 formulas. [14]

ASSOCIATION: none

Card 2/3

L 1281-66 EWT(1)/FCC/EWA(h) GS/GW
 ACCESSION NR: AT5023599

UR/0000/65/000/000/0285/0314

AUTHOR: Pletnev, V. D.; Skuridin, G. A.; Shalimov, V. P.; Shvachunov, I. N.

TITLE: How solar particles break through into the earth's magnetosphere, the mechanisms by which these particles are captured and accelerated, and the part played by these processes in the dynamics of the geomagnetic trap

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 285-314

TOPIC TAGS: geomagnetic field, solar wind, solar radiation, geomagnetism, charged particle, particle motion, magnetic storm

ABSTRACT: The authors consider the interrelationship between geophysical phenomena which take place in outer space in the vicinity of our planet with regard to the dynamics of the geomagnetic trap. The classical Störmer method is used for analyzing the motion of charged particles in the magnetospheric field. It is found that solar particles cannot break through into the magnetosphere in the central region on the daylight side even in the initial phase of a magnetic storm, but that these particles

Card 1/9

L 3494-66

ACCESSION NR: AP5024184

in the earth's magnetic field. In the inner zone, electrons possess the highest energies (600 kev for 10^8 particles/cm²/sec). The outer zone has two maxima, the first of which occurs at three earth radii with proton energies of 150 kev to 4.5 Mev. The second maximum occurs at 4.5 earth radii with 40 kev electrons. During magnetic storms, the trapping field strength increases because of compression of lines of force. As a consequence of this, particle energy increases and the location of energy maxima move closer to the earth's surface. The interaction of cosmic rays with the terrestrial atmosphere generates yet a third type of particle--the neutron, which eventually decays into a proton and an electron. Although this decay contributes to the number of trapped particles in the Van Allen belts, it does not explain the overall charged particle injection process into the magnetic traps. To explain this phenomenon, a new hypothesis is presented where charged particle injection is associated with a betatron acceleration during the reverse phase of a magnetic storm. Orig. art. has: 16 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

Card 2/2

DP

L 3494-66 EWT(1)/EWP(m)/FS(v)-3/FCC/ENA(d)/ENA(h) GW

ACCESSION NR: AP5024184

UR/0384/65/000/004/0012/0022

AUTHORS: Skuridin, G. A. (Doctor of physico-mathematical sciences); Pletnev, V. D. (Candidate of physico-mathematical sciences); Shalimov, V. P.; Shvachunov, I. N.

TITLE: Solar wind, magnetosphere, and Van Allen belts of the earth

SOURCE: Zemlya i vselennaya, no. 4, 1965, 12-22

TOPIC TAGS: solar wind, Van Allen belt, magnetosphere, high energy electron, magnetic field, magnetic trap

ABSTRACT: The structure of the earth's Van Allen belts was studied in some detail. In order to understand the trapping of charged particles by the earth's magnetic field the fundamental principles of orbit theory are reviewed and the significance of adiabatic invariants discussed. Using a model for the magnetosphere, the various charged particle drifts are analyzed in nonhomogeneous magnetic field traps. It is shown that the Van Allen belts are divided into inner and outer zones with altitudes at the equator ranging from 600 km in the western hemisphere to 1600 km in the eastern hemisphere. This discrepancy is due to the inhomogeneity

Card 1/2

61001-63- EWG(1)/EWG(u)/ECG/ECG-4/EWA(h) Po-4/Pa-5/Pa-4/Pae-2/Peb/Pi-4 GW
 UR/0384/55/000/003/0018/0026 49
 ACCESSION NR: AP5018435

AUTHOR: Skuridin, G. A. (Doctor of physico-mathematical sciences); Pletnev, V. D. (Candidate of physico-mathematical sciences); Shalimov, V. P.; Shvachunov, A. A.
 TITLE: Solar wind, magnetosphere, and the Earth's radiation belt

SOURCE: Zemlya i Vseennaya, no. 3, 1965, 18-26

TOPIC TAGS: solar wind, earth magnetosphere, magnetic storm generation, geomagnetic field perturbation, aurora

ABSTRACT: This is the first part of a study in which, on the basis of experimental data from Soviet and US satellites, the authors advance the hypothesis that all the complex geophysical effects such as the aurora polaris, magnetic storms, dynamics of the radiation belt, and the dynamics of the geomagnetic field, are basically determined by the interaction of the solar corpuscular flows with the Earth's magnetic field. A survey is made of the available experimental and theoretical data on the solar wind and the Earth's magnetosphere. Orig. art. has: 7 formulas and 9 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

Card 1/1 *llc*

SKOWIDIN, O.A., doctor. Physical-mathematical sciences; PERTON, V.I.,
kind. Physical-mathematical sciences; GILBERT, V.I., PHYSICIAN, ...

Solar wind. Impacts. ... and radiation belt of the earth.
(conclusion). Sem. 1 vol. 1 no. 4 12-22 11-AP 1976.
MIR, ...

ACC NR: AP6034567

SOURCE CODE: UR/0020/66/170/006/1290/1291

AUTHOR: Yershkovich, A. I.; Pletnev, V. D.; Shuridin, G. A.

ORG: none

TITLE: Concerning the motion of charged particles in a sharp-corner trap

SOURCE: AN SSSR. Doklady, v. 170, no. 6, 1966, 1290-1291

TOPIC TAGS: charged particle, magnetic trap, particle trajectory

ABSTRACT: It is shown that in a magnetic trap with opposing fields, where the summary magnetic field is given by

$$H_\rho = -A\rho; \quad H_\varphi = 0; \quad H_z = 2Az,$$

the equations of motion of a particle with mass ma and charge e have, besides the solutions already obtained in other papers, also an exact particular solution corresponding to motion along the surface of the cone $\rho^2 = z^2$. Furthermore, trajectories which do not pass through the origin cannot lie on this cone. The time interval T required for the particle to cover the path from the vertex of the cone to the maximum value of z is also determined. The trajectory has a figure-8 form and the complete period of motion is equal to $4T$. This report was presented by Academician G. I. Petrov 24 January 1966. Orig. art. has: 12 formulas.

SUB CODE: 20/ SUBM DATE: 18Jan66/ ORIG REF: 002/ OTH REF: 002

Card 1/1

UDC: 538.691

L 10590-66 FSS-2/EWT(1)/FS(v)-3/FCC/EWA(d) TT/GW
 ACC NR: AP6000304 SOURCE CODE: UR/0293/65/003/006/0854/0876

AUTHORS: Pletnev, V. D.; Skuridin, G. A.; Chesalin, L. S.

ORG: none

TITLE: The dynamics of the geomagnetic trap. 2

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 6, 1965, 854-876

TOPIC TAGS: geomagnetic field, geomagnetism, magnetic field, magnetic field plasma effect, solar magnetic field

ABSTRACT: Various hypotheses on the boundary forms of the magnetosphere are studied, as a continuation of the authors' previous work (Kosmicheskiye issledovaniya, 3, No. 3, 408, 1965). A useful mathematical relationship is the condition of magnetostatic equilibrium obtained from the equation of plasma motion in a magnetic field

$$\rho \frac{dv}{dt} = - \text{grad } p + [j, H],$$

where ρ is the mass density of the plasma, v is the velocity of the particle stream, p is pressure, H is the magnetic field potential, and j is the stream density. Under certain assumptions ($dv/dt = 0$), it can be shown that the limit of the magnetosphere corresponds to the condition

$$p = \frac{H^2}{8\pi}.$$

Card 1/2

UDC: 550.385.41 (047)

ACCESSION NR: AP4026234

S/0293/64/002/001/0051/0063

ASSOCIATION: None

SUBMITTED: 25Dec63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: AS

NO REF SOV: 003

OTHER: 001

Card 3/3

ACCESSION NR: AP4026234

$$\begin{aligned} \frac{d\bar{x}_2}{dt} &= -\frac{\mu c}{eT_{\text{кол}}} \oint_{T_{\text{кол}}} \frac{1}{H} \frac{\partial H}{\partial x_3} dt, \\ \frac{d\bar{x}_3}{dt} &= \frac{mv^2 c}{eT_{\text{кол}}} \oint_{T_{\text{кол}}} \frac{1}{H^2} \frac{\partial H}{\partial x_2} dt - \frac{\mu c}{eT_{\text{кол}}} \oint_{T_{\text{кол}}} \frac{1}{H} \frac{\partial H}{\partial x_2} dt, \\ \frac{d\bar{C}}{dt} &= \frac{e}{T_{\text{кол}}} \oint_{T_{\text{кол}}} \left(\frac{\partial \Phi}{\partial x_2} X_1^{(1)} + \frac{\partial \Phi}{\partial x_3} X_1^{(2)} + \frac{\partial \Phi}{\partial x_1} Y_1 \right) dt, \\ \frac{da_1}{dt} &= \Omega + e \left(\frac{\partial \theta_1}{\partial x_2} X_1^{(1)} + \frac{\partial \theta_1}{\partial x_3} X_1^{(2)} + \frac{\partial \theta_1}{\partial x_1} Y_1 \right). \end{aligned}$$

In system (1) $\mathcal{E} X_1^{(1)} = dx_2/dt$, $\mathcal{L} X_1^{(2)} = dx_3/dt$, $Y_1 = 0$ in the drift approximation. Φ is determined, like θ_1 , by previously derived expressions. System (1), whose full derivation is given, makes it possible to estimate the mean changes in such values as the period of oscillation t_{osc} , amplitude of oscillation A , frequency Ω and the adiabatic invariant J , in the mean drift approximation. "The authors wish to thank Candidate of Physical and Mathematical Sciences B. A. Tverskiy for useful discussions of this paper and valuable comments made during its preparation." Orig. art. has: 43 formulas.

Card

2/3

ACCESSION NR: AP4026234

S/0293/64/002/001/0051/0063

AUTHOR: Pletnev, V. D.; Skuridin, G. A.

TITLE: Motion of a charged particle in a stationary magnetic field in a mean drift approximation

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 1, 1964, 51-63

TOPIC TAGS: magnetic field, stationary magnetic field, nonuniform magnetic field, magnetic mirror, charged particle motion, adiabatic invariant, mean drift approximation

ABSTRACT: The author discusses the motion of a charged particle in a stationary non-uniform magnetic field in a drift approximation, averaged for the period of oscillations of a particle between magnetic mirrors. Derivation of the corresponding equations of motion is by the Volosov method. It is shown that the mean drift approximation corresponds to the approximation of the adiabatic invariant of longitudinal effect (longitudinal invariant). The rate of deviation of this invariant in the mean drift approximation is found. The full system of equations for the motion of charged particle in the mean drift approximation has the form:

Card

1/3

ACCESSION NR: AP4009623

S/0293/63/001/003/0403/0413

AUTHOR: Pletnev, V. D.

TITLE: Distribution of density and intensity of charged particles without consideration of their interaction in a stationary geomagnetic field

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 3, 1963, 403-413

TOPIC TAGS: radiation belt, Earth radiation belt, charged particle density, charged particle intensity, particle density distribution, particle intensity distribution, stationary geomagnetic field, Boltzmann equation, asymptotic solution method

ABSTRACT: The asymptotic method of solving Boltzmann's equation for a low density ionized gas in a strongly stationary magnetic field is employed to evaluate the distribution of density and intensity of charged particles in the Earth's radiation belts. The procedure is expanded to cover maintenance of the linear effect invariant for a particle in a magnetic field. This is done by supplemental averaging of distribution function in relation to the particle oscillation interval between magnetic mirrors. Consideration is given to various possible forms of the distribution function in specified approximations and the corresponding distributions of density and intensity of charged particles in a field. "The authors express gratitude to G.A. Skuridin and B.A. Tverskiy for

Card 1/2

ACCESSION NR: AP4009622

and third invariants in a stationary magnetic field. Orig. art. has: 51 formulas.

ASSOCIATION: none

SUBMITTED: 12Sep63

SUB CODE: EM

DATE ACQ: 30Jan64

NO REF SOV: 013

ENCL: 00

OTHER: 004

Card 3/3

ACCESSION NR: AP4009622

is described and it is shown that, in essence, it is one of the methods of the classical theory of disturbances (perturbations). The authors indicate that one of the consequences of the use of this method is the approximate conservation of the magnetic moment of the charged particle $\mu = \frac{2}{2H}$, which constitutes, in this case, the adiabatic invariant. The conditions for the preservation of μ , as well as the degree of accuracy of its preservation, follow directly from the classical mechanics of the motion of conditionally periodic systems and of systems close to conditionally periodic. For this reason, the authors state, within the framework of the area of applicability of the averaging method it becomes advisable to study the character of the movement of charged particles in a non-uniform magnetic field on the basis of the theory of adiabatic invariants developed in classical mechanics. In the present article, the movement of a charged particle in a non-uniform magnetic field is considered on the basis of a study of the preservation of all adiabatic invariants which correspond to the spatial symmetry of the magnetic system; that is, an analysis is made of the conditions for the conservation of the first, second and third motion invariants of a charged particle in a spatial magnetic system. Since this movement of a particle in a magnetic field is not, strictly speaking, conditionally periodic, in principle there may arise a divergence of the adiabatic approximation, connected with the indivisibility of the variables employed in the Hamilton-Jacobi equation. Finally, there is a discussion of estimation problems with respect to the degrees of accuracy in the preservation of the second

Card 273

ACCESSION NR: AP4009622

S/0293/63/001/003/0387/0402

AUTHOR: Pletnev, V. D.; Skuridin, G. A.

TITLE: The adiabatic invariants of the movement of a charged particle in a stationary, non-uniform magnetic field

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 3, 1963, 387-402

TOPIC TAGS: magnetism, magnetic field, motion, electrostatics, adiabatic invariant, Hamiltonian, stationary field

ABSTRACT: The movement of a charged particle in a stationary non-uniform magnetic field is described by the equation

$$\frac{dv}{dt} = F + \frac{e}{mc} [v \times H], \quad \frac{dr}{dt} = v, \quad (1.1)$$

where $F = eE/m$ - the force acting upon the particle in the electrical field; v - the velocity of the particle; H - the magnetic field. The authors point out that the strict solution of this system of equations presents considerable mathematical difficulties, because of which, at the present time, a number of methods have been developed for its approximate solution. One of these methods, which has won wide acceptance, is the so-called "averaging method". The physical sense of this method

Card 1/3

23460

S/049/61/000/001/007/008
D226/D306

Problem of the distribution ...

the anisotropic distribution of corpuscular radiation at the equator in the permissible angular range, and the case when the set intensity at the equator diminishes with the decrease of angle α_0 . The results are given graphically in the article. These results indicate that the anisotropy of corpuscular radiation and also variations in its intensity at any point on a line of force enable the radiation distribution along the whole line to be assessed, even at the equator. The necessary data may be obtained by penetrating to a particular line of force at different altitudes with the help of rockets and earth satellites. The given method affords the opportunity of solving not only the problem of the relative distribution of corpuscular radiation along a line of force but also that of its absolute distribution in space. Since it is insufficiently known at present how the intensity of corpuscular radiation varies with altitude at the equator, both this problem and that concerning the distribution of radiation according to particle energy have not been considered here. There are 1 figure and 3 Soviet-bloc references.

Card 3/4

3

Acad Sci USSR, J. Nucl. Energy C, Plasma Phys. 7, 1964, 1022

23460

S/049/61/000/001/007/008
D226/D306

Problem of the distribution ...

in space $(x_i; v_j)$ and H_k is the component of the field strength. Owing to the high particle energy it is possible to disregard the reaction of charged particles with themselves and with the surrounding medium, hence there is no collision term in this equation. The Earth's magnetic field is considered to be dipolar, the center of the dipole being at the Earth's center. The author then proceeds to solve the equations of particle movement for a stationary magnetic field. Complete isotropy of corpuscular radiation, states the author, is impossible under actual terrestrial conditions owing to the strong absorbant effect of the lower atmospheric layers, and a charged particle moving at an angle to the line of force smaller than a certain critical angle $\alpha_k(r; \Phi)$ has relatively short existence, as has been shown by V.D. Pletnev (Ref. 3: Proniknoveniye bystrykh zaryazhennykh chastits iz verkhney atmosfery v ionosferu (Penetration of Fast Charged Particles from the Upper Atmosphere into the Ionosphere) Izv. Akad. Nauk SSSR, ser. geofiz., No. 8, 1959). The author then considers different instances for

Card 2/4

3

23460

S/049/61/000/001/007/008
D226/D306

3,9110(1121,1482)

AUTHOR: Pletnev, V.D.

TITLE: Problem of the distribution of corpuscular radiation
in the Earth's stationary magnetic field

PERIODICAL: Akademiya nauk SSSR. Seriya geofizicheskaya. Izvestiya,
no. 1, 1961, 150 - 153

TEXT: The author states that in connection with the discovery in
the upper atmosphere of large numbers of fast charged particles
retained by the Earth's magnetic field it is of interest to assess
the distribution of these particles in the absence of geomagnetic
disturbances, for which purpose it is possible to use the simpli-
fied Boltzman equation

$$v_j \frac{\partial f}{\partial x_j} + \frac{e}{mc} \epsilon_{ijk} v_j H_k \frac{\partial f}{\partial v_i} = 0, \quad (1)$$

where f is the function of the distribution of charged particles

Card 1/4
3

3.3420
S/049/62/000/010/002/003
D207/D308

AUTHORS: Yershkovich, A.I. and Pletnev, V.D.

TITLE: Angular anisotropy of radiation in the
Van Allen belts of the earth

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya
geofizicheskaya, no. 10, 1962, 1441-1445

TEXT: The published work on the various types
of angular distributions of charged particles in the Van Allen
(radiation) belts is reviewed. It is shown that the degree and
the nature of the anisotropy of the particle distribution are
not constant in space (they vary away from the earth) or in time
(quiet periods or disturbances). The possibility of the appearance
of unstable plasma in the upper atmosphere, related to the strong
anisotropy of the angular distribution of electrons, is discussed.
There are 2 figures.

ASSOCIATION: Institut fiziki atmosfery, Akademiya nauk SSSR

Card 1/2

S/049/62/000/007/001/001
D207/D304

3.2430

AUTHORS:

Pletnev, V.D. and Temnyy, V.V.

TITLE:

Interaction of a solar corpuscular stream with
the external geomagnetic field in the first
stage of a magnetic storm

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Seriya geofizi-
cheskaya, no. 7, 1962, 978 - 980

TEXT:

A mathematical dissertation on the interaction
of particles in a solar stream with the earth's magnetic field. It
is assumed that during the first 1 1/2 hours of a magnetic storm,
the solar stream compresses the geomagnetic field from 10 a to 4 a,
where a is the earth's radius, until the magnetic-field energy is
equal to the energy density of the stream particles. It is shown that
solar protons in front of the stream are accelerated and enter the
atmosphere at about 9.5 a having acquired energies of several million
electron-volts. Similarly, solar electrons increase their energy from

Card 1/2

✓
B

PLETNEV, V.D.

One possibility of the leakage of charged particles from the
external geomagnetic field. Izv. AN SSSR. Ser.geofiz. no.11:
1671-1673 N'60. (MIRA 13:11)

1. AN SSSR, Institut fiziki atmosfery.
(Magnetism, Terrestrial) (Cosmic rays)

AUTHOR: Pletnev, V. D.

SOV/49-59-8-8/27

TITLE: Penetration of Fast Moving [✓]Charged Particles from the Upper Atmosphere to the Ionosphere

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 8, pp 1164-1166 (USSR)

ABSTRACT: The waving motion of charged particles trapped by the magnetic field of the Earth is considered. The direction of streams of vibrating particles can be precisely determined in the anisotropic space due to the absorbing action of the lower layers of the atmosphere. This can be shown by Eqs (1) to (7), where θ_x - angle of stream in relation to a line of magnetic force at a distance r_x from the Earth's centre, Φ_x - geomagnetic latitude, H_x and H_0 - strength of the magnetic field at the points (r_x, Φ_x) and (r_0, Φ_0) respectively, M - moment of the Earth magnetic dipole, the distance of which from the magnetic line of force is b , a - Earth's radius, h - height above sea level. The Table, p 1165, gives the values of θ_x calculated with 1° of accuracy for different Card 1/2 Φ_x , h_x and h_0 , where the three values correspond to

NOSKIN, R.A., kand.tekhn.nauk, red.; BORISOV, Yu.S., inzh., red.;
PLETNEV, V.D., inzh., red.; MIKHAYLOVSKIY, V.I., inzh., red.;
GOLOV, V.P., inzh., red.; POPOV, A.T., inzh., red.; EL'KIND, V.D., tekhn.red.

[Modernization and repair of machinery plant equipment] Moderni-
zatsiya i remont oborudovaniya mashinostroitel'nykh zavodov. Pod
red. R.A.Noskina. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1959. 261 p. (MIRA 13:3)

1. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy pro-
myshlennosti. Tsentral'noye pravleniye.
(Industrial equipment--Maintenance and repair)

PLETNEV, S.D.

Clinical problems of vronchial adenoma. Vop.onk. 7 no.2:60-
68 '61. (MIRA 14:5)
(BRONCHI--TUMORS)

PLETNEV, S.D.

Anesthesia in reduction of a shoulder dislocation. Khirurgiia, Moskva
34 no.11:127-128 N '58. (MIRA 12:1)

1. Iz khirurgicheskogo otdeleniya Saltykovskoy rayonnoy bol'nitsy
(glavnyy vrach S.D. Pletnev) Penzenskoy oblasti.
(SHOULDER, disloc.
fixation, anesth. (Rus))

PIETNEV, S.D.

Malignant degeneration of bronchial adenomas. Khirurgiia no.1:
103-107 '62. (MIRA 15:11)

1. Iz khirurgicheskoy kliniki (zav. - prof. D.P. Fedorovich)
Moskovskogo gosudarstvennogo onkologicheskogo instituta imeni
P.A. Gertsena (dir. - prof. A.N. Novikov, nauchnyy rukovoditel' -
chlen-korrespondent AMN SSSR prof. A.I. Savitskiy).
(BRONCHI---CANCER)

PLETNEV, S.D. (Moskva, V-49, Leninskiy pr. d.11, kv.29)

Bronchial adenoma and the methods of its treatment. Vop.onk.
(MIRA 16:9)
9 no.2:41-48'63.

1. Iz torkal'nogo atdeleniya (zav. - dotsent med. nauk N.D.Garin)
Gosudarstvennogo nauchno-issledovatel'skogo onkologicheskogo in-
stituta imeni P.A. Gertsena (Dir. - prof. A.N.Novikov).
(BRONCHI--TUMORS) (LUNGS--SURGERY)
(BRONCHOSCOPY)

PIETNEV, S.D.

Benign cartilaginous tumors of the lung. Vol. onk. 11 no. 3:55-
60 '65. (MIRA 18:4)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo onkologicheskogo
instituta imeni Gertsena (dir. - prof. A.M. Novikov).

PROCESSES AND PROPERTIES INDEX																									
LIT. AND ENG. DRUGS													THER. AND PHYS. PROPERTIES												
LIT. AND ENG. DRUGS													THER. AND PHYS. PROPERTIES												
<p><i>*Electrolytic Production of Metallic Lithium. N. A. Isgarshchey and S. A. Plotney (Zvestye Metallurgii (The Non-Ferrous Metals), 1932, 536-542; C. Abs., 1933, 27, 4175). - [In Russian.] Fused lithium chloride plus potassium chloride (1:1) was electrolyzed in a magnesium silicate lined iron cell with graphite anode and iron cathode. The output of the cells was 1 kg. day lithium at 225 amp. and 17 v., or 75 kw.hr. kg. lithium. Efficiency was about 85%. The lithium analyzed potassium 0.23, magnesium 0.19, and sodium 0.5%. The sodium was an impurity in the potassium chloride used. The magnesium came from the lining. S. G.</i></p>																									
<p>ASAC 51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									

M

The Application of the Polarographic Method of Analysis to Production Control in Non-Ferrous Metallurgy. S. A. Plotnev, T. V. Artyeva, E. M. Tal, and E. I. Dubovitskaya (*Zavod. Lab.*, 1946, 12, (1), 38-58). (In Russian). Methods are described for: (1) determining Cu, Pb, and Zn in Cd, (2) the control of industrial solutions and products in Co production, (3) determining Cu, Bi, Pb, Cd, and Zn in Sn and Pb-Sn solders, (4) determining impurities in Pb, (5) rapid determination of Pb, Cd, and Zn in ores and tailings from enriched ores. In many cases, for the basic electrolyte, use was made of solutions of salts of the metals being analysed, thus enabling the necessary determinations to be carried out without the sample having to undergo any kind of chemical treatment, with consequent economy in time. S. A.

11

ASB-35A METALLURGICAL LITERATURE CLASSIFICATION

REGIONAL NOMENCLATURE

RESEARCH UNIT ONLY LIST

RESEARCH UNIT ONLY LIST

BC

A-4

*Variations in chromosome number in somatic tissues of cat.
S. A. Plotner (comp. from Acad. Sci. U.S.A., 1941, 81, 491-
493). Chromosome counts of between 38 and 46 were found in
cells from different somatic tissues in the cat.*

J. D. B.

1. FLETCHER, S. A.

1. FLETCHER (600)

Professor, Chair of Physical Chemistry, Institute of Chemistry,
Institute Electrolytic Center of M. S. U., (S. S. S. R.)
by H. A. R. A., Reviewer by Fletcher, S. A. J. Am. Chem. Soc.,
No 10-11, Oct.-Nov. 1951.

2. [REDACTED] Report 1-1006, 1951

PLETNEV, S.

USSR / Farm Animals. General Problems.

Q-1

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 45132

Author : Pletnev, S.

Inst : Not given

Title : On the Micromorphology of the Vegetative Nervous System
of the Compound Stomach of Ruminants.

Orig Pub : Sb. nauchn. rabot teor. i klinich. kafedr Stalingr. med.
in-ta, Stalingred, 1956, 66-70.

Abstract : The nervous apparatus of the compound stomach of the cow, sheep and goat was studied according to the technique developed by Bil'shovskiy-Gross and modified by Campos. The peculiarities of the intermuscular nerve plexus of the rumen, reticulum and omasum, as well as those of the submucosal plexus of the cow's stomach, are described. The Existence of the intranodular interneural connectors was established. In the submucosal plexus of the sheep's stomach, a morphological substratum of the local reflex arc of the primitive type was ascertained.

Card 1/1

PLETNEV, P.S.

Means of repairing cracks in the bilge of a suction dredge. Rats.
predl. no. 47:12-14 '59. (MIRA 14:4)

1. Stalingradskaya kontora tresta "Gidromekhanizatsiya."
(Dredging machinery--Repair and maintenance)

PLETNEV, P.S.

Electric deposition welding of herring-bone gears of type 500-60
suction dredge. Rats. predl. no. 47:9-10 '59. (MIRA 14:4)

1. Stalingradskaya kontora tresta "Gidromekhanizatsiya."
(Gearing, Spiral) (Electric welding)

PLETNEV, P.P.

Molder for cutting sofa roller disks, Der.prom. 11 no.3:25
Mr '62. (MIRA 15:2)
(Woodworking machinery)

PLETNEV, P., kand.tekhn.nauk

Plant-institutions of higher learning and their future. Sov.
profsoiuzy 19 no.14:11-13 J1 '63. (MIRA 16:9)
(Education, Cooperative) (Technical education)

KAYZERMAN, M.M., mayor meditsinskoy sluzhby; ZAVRAZHIN, M.K., podpolkovnik meditsinskoy sluzhby; KNYAZEV, S.V., podpolkovnik meditsinskoy sluzhby; KOBYAKOV, N.I., podpolkovnik meditsinskoy sluzhby; DOKUCHAYEV, G.M., podpolkovnik meditsinskoy sluzhby; PLETNEV, N.N., polkovnik meditsinskoy sluzhby; KHCROSHCHEV, V.D., podpolkovnik meditsinskoy sluzhby; GORBACHIK, Ye.D., podpolkovnik meditsinskoy sluzhby; DRUKER, Yu.S.; NAZAROV, K.M.; KOMOGOROV, P.R., polkovnik meditsinskoy sluzhby; KLIMENKO, A.V., podpolkovnik meditsinskoy sluzhby; RYAKHOVSKIY, I.Ye., podpolkovnik meditsinskoy sluzhby; IVAN'KOVICH, F.A.; GUBIN, S.V., kapitan meditsinskoy sluzhby; ZOTOV, I.G., kapitan meditsinskoy sluzhby; LEONOVA, Ye.I.; BUNTOVSKIY, P.A., mayor meditsinskoy sluzhby; GERASIMOV, A.N., podpolkovnik meditsinskoy sluzhby; GUR'YEV, I.A., kapitan meditsinskoy sluzhby; KOLDOBSKIY, S.Z., mayor meditsinskoy sluzhby

Abstracts. Voen. med. zhur. no.10:74-79 0 '65.

(MIRA 18:11)

PLETNEV, N.F.; SMIRNOV, V.I.

Determination of the sulfur dioxide buoyancy during interaction of
antimony sulfide and oxide. Trudy Ural.politekh.inst. no.58:153-158
'57. (MIRA 11:4)

(Sulfur dioxide) (Antimony sulfide) (Antimony oxide)

PLETNEV, N.F.; SMIRNOV, V.I.

Studying the interaction between the sulfide and the oxide
of antimony in the vapor phase. Trudy Inst.met.UFAN SSSR
no.5:117-122 '60. (MIRA 13:8)
(Antimony sulfide) (Antimony oxide) (Vapor plating)

SMIRNOV, V.I.; PLETNEV, N.F.

Interaction between antimony sulfide with its trioxide in
the liquid phase. Trudy Inst.met.UFAN SSSR no.5:109-116
'60. (MIRA 13:8)

(Antimony sulfide)

(Antimony oxide)

Al'mskiy nauch. SSR. Ural'skiy filial. Institut metallurgii

Voprosy kontrolya i kompleksovo ispol'zovaniya spets. v metallurgii

(Problemy kontrolya i kompleksovo ispol'zovaniya spets. v metallurgii)

lyub. Smolensk, 1960. 194 p. (Series: Iss. Trudy, Vyp. 5) Izdat.

Resp. Eds.: M. I. Kochnev, and V. P. Chernobrovkin, Candidates of Technical

Sciences. Ed. of Publishing House: I. M. Dzhin; Tech. Eds.: L. A. Imshurova,

and N. Y. Serebryakova.

PURPOSE: This collection of articles is intended for technical personnel of

metallurgical plants and for members of scientific research institutes.

COVERAGE: The collection contains articles discussing a variety of problems

pertaining to ferrous and nonferrous metallurgy. A number of articles

describe new methods for investigating metallurgical processes. A number of articles

review changes which these properties of alloys and alloys

of temperature and other factors. Findings of studies are summarized

in numerous articles and processes to be used for manufacturing ferrous

metal compounds. Articles are also given on the characteristics of various

ores are indicated. Some of the articles are devoted to utilization of

manufacturing ferrous, nonferrous, and rare metal to the study of problems

topics was made on the basis of the need for material relating to the solution of

problems. No personalization of the articles is made. The selection of

by previous ones, most of which are Soviet. Each article is accompanied

Abstract. On the Problems of Producing Naturally-Alloyed Vanadium Steel

From Vanadium Pig Irons Free of Sulfur and Phosphorus by Smelting

Process

Reagin, V.F. The Action of Carbon Monoxide on the Iron Oxide Dehydration

Process

Reagin, V.F. Secondary Oxidation of Iron Monoxide

Kochin, M.P. (deceased) Ways of Utilizing the Metal [Deposits] Ores

Reagin, V.F., and O.A. Zevin. Concerning Transfer of Iron With the

Flow in the Electrolysis of Molten Iron Silicate

Kochnev, M.I., and A.P. Plomnikov. Regularity Patterns in Changes of the

Electrical Resistance of Cobalt and Copper Arsenides

Molava, R.D., and P. S. Ruskin. Microscopic Investigation of Products Re-

sulting from Oxidation of Metal Monoxides With Elementary Sulfur

Reagin, V.F., and V.I. Shumov. Interaction of Arsenic Sulfide and

Its Trioxide in Liquid Phase

Reagin, V.F., and V.I. Shumov. Study of the Interaction of Arsenic

Sulfide and Oxide in Gaseous Phase

Densitskiy, M.P., and S. Ruskin, M.P. Mier (deceased), A.A. Pustoshkin,

A.I. Pustoshkin, D.V. Pustoshkin, and L.V. Pustoshkin. Self-Heating

of Oxidized Metal Ore Under Highly Sulfurous Gases

Zelenskaya, A.I., and L.S. Gornikova. Determination of Small Quantities

of Selenium in Anodic Copper

Zelenskaya, A.I., and L.S. Gornikova. Polarographic Method of Determin-

ing Tellurium in Copper and Lead-Containing Compounds

Reagin, V.F., and V.I. Shumov. Electrical Conductivity of Melts of the

Al₂O₃-NaCl System

Reagin, V.F., and V.I. Shumov. Equilibrium Diagram of the NaF-AlF₃-NaCl

System

Zelenskaya, A.V., and P.A. Reagin. Effect of Impurities on the

Rate of Chlorination of Vanadium Oxide in Molten Chloride Salts

Serebryakova, A.Y., and P.A. Reagin. Effect of Certain Factors on the

Rate of Chlorination of Magnesium Oxide

Reagin, V.F., and P.A. Reagin. On the Recovery of Sulfuric Acid and

Potassium Sulfate from Mixtures of Sulfuric Acid and

AVAILABILITY: Library of Congress

PLETNEV, N.F.

PLETNEV, N.F.; KLYUYEVA, A.N.

Efficient chemical analysis for antimony compounds. Trudy Ural.
politekh. inst. no.98:5-10 '60. (MIRA 14:3)
(Tailings(Metallurgy)--Analysis)
(Antimony compounds--Analysis)

CP

4

Electrolytic production of metallic lithium - N. A. Izgumshchey and S. A. Plotnyy, *Trudovye Metal.* 1932, 506-42. Used LiCl plus KCl (1:1) was electrolyzed in a Mg-sheate-lined Fe cell with graphite anode and Fe cathode. The output of the cells was 1 kg./day Li at 225 amp. and 17 v., or 75 kw. hr./kg. Li. Efficiency was about 85%. The Li analyzed 0.23% K, 0.19% Mg, and 0.5% Na. The Na was an impurity in the KCl used. The Mg came from the lining. B. N. Dondoff

ASME-SEA METALLURGICAL LITERATURE CLASSIFICATION

12

Pyrolysis of cracked gas in the vapor-phase cracking unit of the Baku cracking plant. K. N. Pletnev. *Notovsk Neftepererabotka* 3, No. 7, 1-2 (1930). A cracked gas freed of gasoline fractions was cracked at 5 atm. pressure and temps. of 625-600°. The reactive ingredients in the original gas varied from 48.00 to 66.65%; they were lowered after the pyrolysis to 21.24 to 1.61% (by weight), depending upon the temp. Best results were obtained at a process temp. of 600°, which yielded a gasoline of 90 octane no. A. A. Bochtlingk

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1ST AND 2ND COVERS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH COVERS																																																																															
BC										B-1-3																																																																																									
<p>Products of cracked gas in the one-stage cracking unit of the Beta cracking plant. E. K. Stewart, <i>Ind. Eng. Chem. Anal. Ed.</i>, 1934, 6, No. 7, 1-2. —The best results were obtained on a cracked gas freed from gasoline fractions by cracking at 600°/5 atm. The gasoline produced had C₁₂H₂₄ no. 60. Cw. Ass. (v)</p>																																																																																																			
ASB-31A METALLURGICAL LITERATURE CLASSIFICATION																																																																																																			
GROUPS										SUBGROUPS										SUBSUBGROUPS																																																																															
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100																																																																															

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200001-6

red. 120-va; ABERBURN, F.P., GORHAM, L.W.

[Relay protection and automatic control] Releinaia zashchita
i avtomatika. Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1961.
53 p. (MIRA 15:3)
(Electric protection) (Automatic control)
(Electric power distribution)

PIETNEV, L.F.

Choice of PK and PXT protective units. *Energetik*. 13 or. 9:40
S '65. (MIRA 18:1)

1. Nachal'nik sluzhby rel'eynoy zashchity Moskovskoy kabel'noy
seti.

CHURAKAYEV, Anas Mirgaliyevich; PLETNEV, K.N., red.; LEVINA, Ye.S.,
ved. red.; POLOSINA, A.S., tekhn. red.

[Stripper plants] Gazootbenzinivaiushchie ustanovki. Moskva,
Gostoptekhzdat, 1962. 141 p. (MIRA 15:7)
(Gas, Natural) (Gasoline)

SARKIS'YANTS, Gayk Arkad'yevich; BEN'YAMINOVICH, Osip Aleksandrovich;
KEL'TSEV, Vladimir Vladimirovich; KEL'TSEV, Nikolay
Vladimirovich; POLOZKOV, Vladimir Tikhonovich; KHALIP,
Al'bert L'vovich; KHODANOVICH, Ivan Yefimovich; RAABEN, V.N.,
kand. tekhn. nauk, retsenzent; PLETNEV, K.N., inzh., red.; LEVINA,
Ye.S., ved. red.; POLOSINA, A.S.; ~~tekhn.~~ red.

[Processing and utilization of gas] Pererabotka i ispol'zovanie
gaza. [By] G.A. Sarkis'iants i dr. Moskva, Gostekhnizdat, 1962.
216 p. (MIRA 16:3)

1. Kafedra gaza Azerbaydzhanskogo ordena Trudovogo Krasnogo Zna-
meni instituta nefti i khimii im. M. Azizbekova (for Raaben, Pletnev).
2. Zamestitel' direktor Vsesoyuznogo nauchno-issledovatel'skogo
instituta gazovoy promyshlennosti (for Raaben).
(Gas, Natural)
(Gas industry--Equipment and supplies)

PLETNEV, Lev Fedorovich; SEMENOV, V.A., red.; SHIROKOVA, M.M., tekhn. red.

[Checking and adjustment of direct action relays] Rele priarogo deistviia, ikh naladka i proverka. Moskva, Gos. energ.izd-vo, 1961.
46 p. (MIRA 14:11)

(Electric relays)

PLETNEV, L.F., Inzh.

Principles of the automation of electric power distribution networks
in greater Moscow. Energetik 12 no.2:4-8 P 164. (MIRA 1712)

PLETNEV, Lev Fedorovich; SEMENOV, V.A., red.

[Automatic control devices in municipal electric power distribution networks] Ustroistva avtomatiki v gorodskikh elektrosetiakh. Moskva, Izd-vo "Energiia," 1964. 61 p. (Biblioteka elektromontera, no.121) (MIRA 17:4)

PLETNEV, K.H.

Design petroleum refineries to meet high technical standards.
Prom. stroi. 37 no.11:2-4 N '59. (MIRA 13:2)

1.Gosstroy SSSR.
(Petroleum refineries)

PLETNEV, I.Ye.

Concerning the reconstruction of the Bibi-Khanym mausoleum in Samarkand.
Sbor.nauch.trud.NII po stroi. ASIA no.3:90-108 '62. (MIRA 17:2)

PLETNEV, I. I.

Pletnev, I. I., "A graphic method for calculating continuous girders," Sbornik nauch. trudov (Kuybyshevsk. inzh. -stroit. in-t im. Mikoyana), Issue 2, 1948, p. 207-17.

So: U-3736, 21 May 53, (Letopis' Zhurnal'nykh vstalei, No. 17, 1949).

TITKOV, V.A.; PLETNEV, I.D.

New synthesis of dyes of the triazine series. Part 2: Vat dyes of the triazole-triazine series. Zhur.ob.khim. 33 no.4:1355-1357 Ap '63. (MLA 16:5)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley. (Dyes and dyeing) (Triazine)

TITKOV, V.A.; PLETNEV, I.D.

New synthesis of dyes of the triazine series. Part 1:
Vat dyes. Zhur.ob.khim. 33 no.3:963-966 Mr '63. (MIRA 10:3)

1. Nauchno-issledovatel'skiy institut organicheskikh
poluproduktov i krasiteley.
(Triazine)
(Dyes and dyeing)

TITKOV, V.A.; PLETNEV, I.D.

New synthesis of dyes of the triazine series. Part 3: Nitrophenyl (alkyl)triazine dyes. Zhur.ob.khimi. 33 no.6:1982-1982 Ja '63. (MIRA 16:7)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

(Dyes and dyeing) (Triazine)

"PLETNEV, I.D.; TITKOV, V.A.; VAYNTROB, S.S.; TOROCHESNIKOVA, L.V.

New synthesis of dyes of the triazine series. Part 4: Dyes
for synthetic fibers. Zhur. org. khim. 1 no.11:2019-2022
N '65. (MIRA 18:12)

1. Nauchno-issledovatel'skiy institut organicheskikh
poluproduktov i krasiteley. Submitted December 26, 1964.

TITKOV, V.A.; PLETNEV, I.D.

Connection between the structure of vat anthraquinone dyes
and their photoactivity. Zhur. prikl. khim. 36 no.5:1116-
1122 My '63. (MIRA 16:8)

1. Nauchno-issledovatel'skiy institut organicheskikh
poluproduktov i koasiteley.
(Anthraquinones) (Dyes and dyeing) (Photochemistry)

Experimental Determination of the Frequency Characteristics SOV/161-58-4-27/28
of Regulating Sectors by Connecting Them With the Circuit of a Non-linear Hunting
System

amplitude-relations need not be computed.- The method shown here enables the determination of the frequency characteristics of the examined object, in accordance with the dynamic characteristics of the regulator. These characteristics are expressed by dimensionless time-parameters. These parameters give the actual picture of the motion on the regulator-exit, of the dead-band, and of the limited servomotor speed. By using the nomogram on figure 6, it is possible to construct the vector of the amplitude-phase characteristic, without having to use the methods of the operational calculus and the function theory of the complex variable. There are 9 figures and 3 Soviet references.

ASSOCIATION: Kafedra teplovogo kontrolya i avtomatiki Moskovskogo energeticheskogo instituta (Chair for Heat Control and Automation at the Moscow Institute of Power Engineering)

SUBMITTED: August 4, 1958

Card 2/2

8(2), 28(1)

AUTHORS:

Rotach, Vitaliy Yakovlevich, Assistant, SOV/161-58-4-27/28
Pletnev, Gennadiy Panteleymonovich, Assistant

TITLE:

Experimental Determination of the Frequency Characteristics of Regulating Sectors by Connecting Them With the Circuit of a Non-linear Hunting System (Eksperimental'noye opredeleniye chastotnykh kharakteristik uchastkov regulirovaniya putem ikh vkl'yucheniya v nelineynuyu avtokolebatel'nuyu sistemu)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika, 1958, Nr 4, pp 240 - 252 (USSR)

ABSTRACT:

A new method is presented for the determination of the frequency characteristics of industrial objects. Its particularity is that the examined object is connected with the circuit of a closed, non-linear hunting system, which consists of the actual regulator and a relay-element. By altering the tuning parameters of the regulator and of the initial signal level of the relay-element, the frequency and the amplitude of the hunting system can be altered. The advantages of the system shown here are: No drift of the intermediate oscillation-line during the experiment; only one coordinate of the system must be recorded; no harmonic analysis of the test results is necessary, that is, the phase-shift and the

Card 1/2